

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/487,688 01/19/00 SCHOCH

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022855  
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MMC:2/1101

EXAMINER

CHOT, S

ART UNIT

PAPER NUMBER

2857

DATE MAILED:

11/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/487,688	SCHOCH, DANIEL A
	<b>Examiner</b>	Art Unit
	Sam H Choi	2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 December 2000.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 January 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                           | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . | 6) <input type="checkbox"/> Other: _____ .                                   |

## DETAILED ACTION

### *Drawings*

1. The drawing is objected to because the elements included in it are not properly identified. Elements 14, 18, 38, and 56 are generic figures and are not identifiable. Correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-12, 17-23, and 27-29 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,209,400 to Schoch et al.

Referring to claims 1-3, 5, 11-12, 19, 23, and 29, Schoch et al. disclose a device for monitoring the operation of a mechanical press comprising: at least one accelerometer measuring press conditions and creating a corresponding signal (see column 3, lines 50-53); a signal conditioner connected to the signal generator, calculating a press acceleration value, a press velocity value, and/or a press displacement value (see column 3, lines 54-61); a display connected to the

signal conditioner, displaying one of the calculated values (see column 3, lines 62-63); and a switch permitting an operator to select one of the calculated values for input to the display (see column 3, lines 63-66).

Referring to claim 4, Schoch et al. disclose a device, wherein the signal conditioner is attached to the press (see column 4, lines 47-49).

Referring to claims 6-7, Schoch et al. disclose a device, wherein the signal conditioner processes the calculated value by a peak to peak detector, and further conditions the calculated value with an RMS to DC voltage converter (see column 4, lines 54-58).

Referring to claim 8, Schoch et al. disclose a device, wherein the display includes a volt meter for displaying the calculated value (see column 3, lines 67 to column 4, line 1).

Referring to claims 9,10, and 20-22, Schoch et al. disclose a device, wherein the display includes at least one LED indicating a vibration severity zone, which is characterized by one selected from the following: extreme long-term reliability; very good long-term reliability; reliable conditions under caution; and conditions that are not advisable for long-term reliability (see column 9, lines 20-34).

Referring to claims 17 and 27, Schoch et al. disclose a device, further comprising a data storage device for selectively storing digitized output (see column 9, lines 57-59).

Referring to claims 18 and 28, Schoch et al. disclose a device, further comprising a modem (see column 9, lines 50-57).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13-15 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoch et al. in view of U.S. Patent No. 5,602,757 to Haseley et al.

Referring to claims 13, 14, and 24: as noted above, Schoch et al. disclose devices for monitoring the operation of a mechanical press. Schoch et al. do not disclose a press machine controller for controlling press functions, nor such a controller including a programmable logic controller (PLC). Haseley et al. disclose a vibration monitoring system including a microcontroller to control the operations of the monitored machine (see column 4, lines 12-27). It is noted that a microcontroller and a PLC are interchangeable in this type of application. It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the monitoring device of Schoch et al. to include a microcontroller, as taught by Haseley et al., to control the operations of the monitored machine because the microcontroller could immediately shut down the monitored machine if it were operating over a critical level.

Referring to claim 15: as noted above, Schoch et al. in combination with Haseley et al. teach a monitoring device including a microcontroller to control the operations of the monitored machine. Schoch et al. do not teach a press machine controller for calculating vibration severity versus time. Haseley et al., however, further disclose that the microcontroller processes a vibration severity versus time calculation (see Haseley et al., column 7, lines 14-20). It is noted that the calculation is further processed into a vibration versus frequency output (see Haseley et al., column 7, lines 17-20), but the output can just as easily be a graph of vibration versus time. It would therefore have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the monitoring device of Schoch et al. to include a microcontroller, as taught by Haseley et al., to process a vibration severity versus time calculation for output because such a modification would enable users of the monitored machine to keep track of the vibrational performance of the machine, to ensure that it is still reliable.

6. Claims 16, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoch et al. in view of U.S. Patent No. 5,094,107 to Schoch.

Referring to claims 16, 25, and 26: as noted above, Schoch et al. disclose devices for monitoring the operation of a mechanical press. Schoch et al. do not disclose an alarm signal generator which generates a signal, for example, lighting a light at the press machine. Schoch discloses a press vibration/severity monitoring system including a visual or audible alarm to alert users when the press has reached a predetermined reliability zone (see Schoch, column 7, lines

55-60). One of ordinary skill in the art would recognize that the visual alarm of Schoch could be placed at any desired location, including at the press machine. Accordingly, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to modify the monitoring device of Schoch et al. to include an alarm, as taught by Schoch, because such an alarm would immediately indicate when the press is operating at critical levels.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

O'Brien (U.S. Patent No. 4,987,528) discloses a signature analysis control system for a stamping press.

### ***Contact Information***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam H. Choi whose telephone number is (703) 305-1932. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff, can be reached at (703) 308-1677. The fax number for TC 2800 is (703) 305-7382. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2800 receptionist whose telephone number is (703) 308-1782.

Art Unit: 2857

In order to reduce pendency and avoid potential delays, Group 2800 is encouraging faxing responses of Office Actions directly into the Group at (703) 308-7382. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee, by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2800 will be promptly forwarded to the examiner.

Sam H. Choi

10/25/01



MARC S. HOFF

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800